



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,948	03/02/2005	Kenji Mori	MUR-040-USA-PCT	8463
27955 7590 02/25/2009 TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402				
EXAMINER				
SO, ELIZABETH K				
ART UNIT		PAPER NUMBER		
3766				
MAIL DATE		DELIVERY MODE		
02/25/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,948

Applicant(s)

MORI ET AL.

Examiner

ELIZABETH SO

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 1/13/2009 under 37 CFR 1.131 has been considered but is ineffective to overcome the Higo reference.
2. Claims 1 and 8 have been cancelled per the request of the applicant.

Specification

Due to amendment filed 1/13/2009, the objection to the disclosure has been withdrawn.

Response to Arguments

3. Applicant's arguments filed 1/13/2009 have been fully considered but they are not persuasive. The examiner respectfully disagrees with the assertion that the Higo reference does not teach the claimed subject matter. Note that USPTO personnel are to give claims their broadest reasonable interpretation in light of the specification.
4. In response to applicant's argument that Higo does not teach an electrode structure consisting of layers of a non-polarized component layer provided on a polarized component layer, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Higo et al (US 6,259,946) (cited previously).

Referring to claim 2, Higo shows an electrode structure comprising an insulating base (see fig. 4, insulating base 3a); a polarized component layer laminated on the insulating base so as not to penetrate the insulating base, the polarized component layer comprising a conductive paste or metallic foil which is predominantly made of a component that can be a polarized electrode (see fig. 4, polarized layer 3b; and col. 5, lines 44-45); and a non-polarized component layer provided on the polarized component layer, the non-polarized component layer comprising a conductive paste which is predominantly made of a component that can be a non-polarized electrode (see fig. 4, non-polarized layer 6; and col. 5, lines 47-49, where it is known in the art that the polarity of an electrolyte depends on its ionic content, so that the electrolytic gel is capable of being a non-polarized conductive gel or paste), wherein the polarized component layer has a protruding portion (see fig. 1, where protrusion 4 is an extension of the electrode layer 3), which is used as a connecting terminal with a power supply section (see col. 4, lines 48-50).

Referring to claim 3, Higo shows the component that can be a polarized electrode is made of one or more materials selected from carbon and other polarizable materials (see col. 3, lines 56-57). It is known to one of ordinary skill in the art that platinum, gold, aluminum, and titanium can be ideal polarizable electrodes and that including them as electrode component options allows for a greater chance in availability of materials.

Referring to claim 4, Higo shows the component that can be a non-polarized electrode is made of one or more materials selected from silver, silver chloride, copper, and copper chloride (see col. 3, lines 57-60).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higo et al (US 6,259,946) as applied to claim 2 above.

Referring to claims 5-7, Higo teaches that the insulating base and other moldable materials can be formed into a thickness between 5 to 250 micrometers (see col. 3, lines 17-21) and the conductive paste can be formed into a thickness of 20 micrometers (see col. 5, lines 44-47). It is obvious to one of ordinary skill in the art at the time the invention was made that if moldable materials besides the insulating base could be formed into a film of thickness varying between 5 to 250 micrometers, and that the conductive paste consisting of polarizable and/or non-polarizable electrodes is moldable, then it follows that the polarized component layer could be formed into a thickness of 1 to 100 micrometers and the non-polarized component layer could be formed into a thickness of 5 to 500 micrometers. It also follows that if the thickness could be controlled, the area could also be controlled, so that the area of the non-polarized component layer is 1 to 10 square centimeters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have altered the electrode structure's dimensions and thickness in order to provide it flexibility while preventing damage such as cracking, since it has been held that where the general conditions of a claim are disclosed

in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.
In re Aller, 105 USPQ 233.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH SO whose telephone number is 571-270-7405. The examiner can normally be reached on Monday - Friday, 10:00 A.M. - 5:00 P.M., EST, and part of the day on Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on 571-272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. S./
Examiner, Art Unit 3766

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit
3766